UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,758	12/21/2000	Keith McCloghrie	CISCP548	4513

26541 7590 06/17/2005

RITTER, LANG & KAPLAN
P.O. BOX 2448
SARATOGA, CA 95070

EXAMINER	
KLINGER, SCOTT M	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/748,758	MCCLOGHRIE ET AL.	
	Examiner	Art Unit	
	Scott M. Klinger	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-9 and 11-23 are pending.

Response to applicant

Note: applicant's remarks are in **bold**, examiner's responses are indented.

This action is non-final due to the new rejections under 35 USC § 101. See below.

Applicants respectfully submit that claim 1 is patentable over Nguyen et al. and Spofford et al., which do not show or suggest sending a message to an agent specifying objects to include in each notification and the order of the objects.

Spofford, Fig. **4** shows an agent **408** that is responsible for updating the dynamic MIB. The agent adds and deletes MIB objects. It is inherently implied that the objects to be deleted or added are sent to the agent. Spofford, Fig. **5A** shows that MIB structures have a specific order, therefore updating objects within the MIB would necessitate knowledge of the order of the objects.

Claim Rejections - 35 USC § 101

Claims 14 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Non-statutory subject matter includes intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched or perceived absent the tangible medium through which they are conveyed. Claim 14 recites in part: *"a computer-readable storage medium for storing codes"*, claim 15 recites in part *"the computer readable medium is selected from the group consisting of ... data signal embodied in a carrier wave"*. It is suggested that references to a carrier wave as a type of

computer readable medium be removed from the specification and claim 15, in order to overcome this rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 and 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent Number 6,219,703, hereinafter "Nguyen") in view of Spofford et al. (U.S. Patent Number 5,913,037, hereinafter "Spofford").

In referring to claims 1 and 14, Nguyen shows substantial features of the claimed invention, including:

- Sending a request from the management station to at least one agent for a list of notifications supported by the agent:
  "NMS retrieves ASN.1 types supported by using Get-next over ASN.1 types table. NMS uses this information to construct ASN.1 types supported and object identifier macros. This table also defines entry list for all tables supported by SNMP agent for device" (Nguyen, Fig. 5, element 510)
- Receiving at the management station the list of notifications supported by an agent; determining objects defined in the notifications
  "NMS retrieves list of standard MIBs supported by using Get-next over the standard MIBs table. Using this information, NMS generates basic structure for the MIB and constructs import statements" (Nguyen, Fig. 5, element 508)

"NMS retrieves list of Traps supported by using Get-next over Traps supported table. This information is used to define Traps that can be generated by the device." (Nguyen, Fig. 5, element 514)

A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

However, Nguyen does not show sending a message to the agent specifying objects to include in each of the notifications and the order of the objects. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Nguyen as evidenced by Spofford.

In analogous art, Spofford discloses a dynamic management information base manager. Spofford shows a network device that can change its MIB structure: Spofford, Fig. **4** shows an agent **408** that is responsible for updating the dynamic MIB. The agent adds and deletes MIB objects. It is inherently implied that the objects to be deleted or added are sent to the agent. Spofford, Fig. **5A** shows that MIB structures have a specific order, therefore updating objects within the MIB would necessitate knowledge of the order of the objects.

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Nguyen so as to send a message to the agent specifying objects to include in each of the notifications and the order of the objects, such as taught by Spofford, in order to lower bandwidth usage by keeping unwanted messages from being sent.

In referring to claim 2, Nguyen in view of Spofford shows,

- Sending a message comprises utilizing a simple network management protocol (SNMP) protocol:

  "Preferably the method and apparatus will utilize existing SNMP methods for communicating between the NMS and the device, so that no additional protocols or connections are required for extracting the MIB information." (Nguyen, col. 1, lines 37-40)

In referring to claim 3, Nguyen in view of Spofford shows,

- Receiving a management information base:
  "NMS retrieves list of standard MIBs supported by using Get-next over the standard MIBs table. Using this information, NMS generates basic structure for the MIB and constructs import statements" (Nguyen, Fig. 5, element 508)

In referring to claim 4,

- Sending a modified management information base:
  Nguyen, Fig. 5, element 508 (quoted above)

In referring to claim 5,

- Receiving a list of objects associated with each of the notifications:
  Nguyen, Fig. 5, element 514 (quoted above)
  A list of objects associated with each of the notifications (referred to as Trap variable bindings in SNMP) is inherently implied in an MIB

In referring to claim 6,

- Adding new objects to the notification:
  Nguyen, col. 1, lines 37-40 (quoted above)
  Specifying objects for each of the notifications (referred to as Trap variable bindings in SNMP) is inherently implied in a system that uses SNMP, which inherently implies adding new objects to the notification

In referring to claim 7,

- Reordering the objects in the notification:
  Nguyen, col. 1, lines 37-40 (quoted above)
  Specifying objects for each of the notifications (referred to as Trap variable bindings in SNMP) is inherently implied in a system that uses SNMP, which inherently implies reordering the objects in the notification

In referring to claim 8,

- Receiving a list of variable bindings for each of the notifications:
  Nguyen, Fig. 5, element 514 (quoted above)
  Receiving a list of variable bindings for each of the notifications is inherently implied in a system that receives a MIB

In referring to claim 9,

- Sending a list of variable bindings for each of the notifications:
  Nguyen, col. 1, lines 37-40 (quoted above)
  Specifying objects for each of the notifications (referred to as Trap variable bindings in SNMP) is inherently implied in a system that uses SNMP

In referring to claim 11,

- Sending a Get request
  Nguyen, col. 1, lines 37-40 (quoted above)
  Sending a Get request is inherently implied in a system that uses SNMP

In referring to claim 12,

- Receiving a Trap message
  Nguyen, col. 1, lines 37-40 (quoted above)
  Receiving a Trap message is inherently implied in a system that uses SNMP

In referring to claim 13,

- Receiving an Inform message
  Nguyen, col. 1, lines 37-40 (quoted above)
  Receiving an Inform message is inherently implied in a system that uses SNMP

In referring to claim 15,

- The computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave:
  "The communication interface 302 is coupled to a processing system 304 for processing the communications and for controlling the NMS 102. The processing system 304 comprises a conventional processor 306 and a conventional memory 308. The memory 308 is programmed with the preloaded MIBs 106 and NMS discovery application 108 in accordance with the present invention." (Nguyen, col. 3, line 66 – col. 4, line 5)
  System memory and hard drives are inherently implied in conventional memory

In referring to claim 16,

- The management station comprises a SNMP manager:
  The management station of Nguyen is an SNMP manager

In referring to claim 17,

- Requesting information on notifications from the agents:
  Nguyen, Fig. 5, element 508 (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)
  A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

In referring to claim 18, Nguyen shows substantial features of the claimed invention, including:

- A processor and a storage medium having the preferred configuration stored thereon: *Nguyen, col. 3, line 66 – col. 4, line 5* (quoted above)
- Receiving at a management station a list of notifications supported by an agent: *Nguyen, Fig. 5, element 508* (quoted above); *Nguyen, Fig. 5, element 514* (quoted above) A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

However, Nguyen does not show sending a message to the agent specifying objects to include in each of the notifications and the order of the objects. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Nguyen as evidenced by Spofford.

In analogous art, Spofford discloses a dynamic management information base manager. Spofford shows a network device that can change its MIB structure: Spofford, Fig. **4** shows an agent **408** that is responsible for updating the dynamic MIB. The agent adds and deletes MIB objects. It is inherently implied that the objects to be deleted or added are sent to the agent. Spofford, Fig. **5A** shows that MIB structures have a specific order, therefore updating objects within the MIB would necessitate knowledge of the order of the objects.

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Nguyen so as to send a message to the agent specifying objects to include in each of the notifications and the order of the objects, such as taught by Spofford, in order to lower bandwidth usage by keeping unwanted messages from being sent.

In referring to claim 19, Nguyen shows substantial features of the claimed invention, including:

- Means for sending a request from the management station for a list of objects currently contained within notifications supported by the agent: *Nguyen, Fig. 5, element 508* (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)

A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

- Means for receiving information specifying contents of notifications supported by an agent within a network at a management station:
  Nguyen, Fig. 5, element 508 (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)
  A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

However, Nguyen does not show sending a message to the agent specifying objects to include in each of the notifications and the order of the objects. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Nguyen as evidenced by Spofford.

In analogous art, Spofford discloses a dynamic management information base manager. Spofford shows a network device that can change its MIB structure: Spofford, Fig. **4** shows an agent **408** that is responsible for updating the dynamic MIB. The agent adds and deletes MIB objects. It is inherently implied that the objects to be deleted or added are sent to the agent. Spofford, Fig. **5A** shows that MIB structures have a specific order, therefore updating objects within the MIB would necessitate knowledge of the order of the objects.

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Nguyen so as to send a message to the agent specifying objects to include in each of the notifications and the order of the objects, such as taught by Spofford, in order to lower bandwidth usage by keeping unwanted messages from being sent.

In referring to claim 20, Nguyen shows substantial features of the claimed invention, including:

- Receiving at a management station a list of notifications supported by an agent:
  Nguyen, Fig. 5, element 508 (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)
  A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

- Modify a list of objects for the notifications to include specified objects in a specified order:

  Nguyen, col. 1, lines 37-40 (quoted above)

  Specifying objects for each of the notifications (referred to as Trap variable bindings in SNMP) is inherently implied in a system that uses SNMP, which inherently implies modification of the list of objects, the order of the objects will remain the same throughout the network

However, Nguyen does not show sending a message to the agent specifying objects to include in each of the notifications and the order of the objects. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Nguyen as evidenced by Spofford.

In analogous art, Spofford discloses a dynamic management information base manager. Spofford shows a network device that can change its MIB structure: Spofford, Fig. **4** shows an agent **408** that is responsible for updating the dynamic MIB. The agent adds and deletes MIB objects. It is inherently implied that the objects to be deleted or added are sent to the agent. Spofford, Fig. **5A** shows that MIB structures have a specific order, therefore updating objects within the MIB would necessitate knowledge of the order of the objects.

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Nguyen so as to send a message to the agent specifying objects to include in each of the notifications and the order of the objects, such as taught by Spofford, in order to lower bandwidth usage by keeping unwanted messages from being sent.

In referring to claim 21,

- Receiving a request from the management station for a list of objects currently contained within notifications supported by the agent:

  Nguyen, Fig. 5, element 508 (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)

  A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB

In referring to claim 22,

- Sending a MIB containing a list of the objects currently contained within the notifications supported by the agent:
  Nguyen, Fig. 5, element 508 (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)

In referring to claim 23, Nguyen shows substantial features of the claimed invention, including:

- A processor and a storage medium having the preferred configuration stored thereon:
  Nguyen, col. 3, line 66 – col. 4, line 5 (quoted above)
- Receiving at a management station a list of notifications supported by an agent:
  Nguyen, Fig. 5, element 508 (quoted above); *Nguyen, Fig. 5, element 514* (quoted above)
  A list of notifications supported by an agent (referred to as Traps in SNMP) is inherently implied in an MIB
- Modify a list of objects for the notifications to include specified objects in a specified order:
  Nguyen, col. 1, lines 37-40 (quoted above)
  Specifying objects for each of the notifications (referred to as Trap variable bindings in SNMP) is inherently implied in a system that uses SNMP, which inherently implies modification of the list of objects, the order of the objects will remain the same throughout the network

However, Nguyen does not show sending a message to the agent specifying objects to include in each of the notifications and the order of the objects. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Nguyen as evidenced by Spofford.

In analogous art, Spofford discloses a dynamic management information base manager. Spofford shows a network device that can change its MIB structure: Spofford, Fig. **4** shows an agent **408** that is responsible for updating the dynamic MIB. The agent adds and deletes MIB objects. It is inherently implied that the objects to be deleted or added are sent to the agent. Spofford, Fig. **5A** shows that MIB structures have a specific order, therefore updating objects

within the MIB would necessitate knowledge of the order of the objects.

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Nguyen so as to send a message to the agent specifying objects to include in each of the notifications and the order of the objects, such as taught by Spofford, in order to lower bandwidth usage by keeping unwanted messages from being sent.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Klinger whose telephone number is (571) 272-3955. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott M. Klinger
Examiner
Art Unit 2153

smk

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100